ABSTRACT

A sensor system is provided for determining a deployment level of an airbag in a vehicle. A light source of the sensor system emits light onto a region around a vehicle seat. An array of light-sensitive pixels which capture reflected light from the scene, including reflected light that originated from the light source. Processing resources are provided that determine depth information for an object in the scene based on a time-of-flight characteristic of the reflected light from the light source captured on the array. The processing resources may be configured to determine occupancy data for the object based on the captured reflected light from the scene. The processing resources are configured to determine the deployment level of the airbag based at least in part on the occupancy data in when a collision of the vehicle occurs

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